

REMARKS

The Office Action contained rejections of the claims under 35 USC §§112 and 103. Each will be responded to below.

a. Response to Claim Rejections - 35 USC. 112

Claims 1-15 were rejected under 35 USC 112, second paragraph, as being indefinite, on grounds that the phrase “sufficient length to support rows of multiple pallets” is indeterminate if one does not know the size of a single pallet. The Examiner asked if pallet size is an industry standard well known to the art, and requested clarification of this limitation.

In response, Applicant has amended claim 1 to recite that the palletized cargo is sized to fill either two abreast or singly the width of a standard highway dry van. The trailers shown in Applicant’s drawings and described in the specification are known in the industry “dry vans”, sometimes referred to as “box vans”, and are standardized in the industry at approximate 8 foot and 8.5 foot outside widths, due primarily to highway regulations. The pallets in turn are standardized at approximate 4-foot square dimensions, the most common being 48 X 40 inches, so that palletized cargo placed thereon will fill the width of a standard dry van two abreast if single pallets are used, or singly if the cargo is palletized on combinations of two, four, six pallets and so on. Slight variations exist from manufacturer to manufacturer and from cargo type to cargo type (e.g., groceries vs. chemicals), but the variations are relatively small, generally amounting to no more than a few inches.

Height of the palletized cargo is generally restricted to about 8 feet for standard dry vans, although the height dimension is not directly relevant to the claimed subject matter.

The size of a pallet as used in the claims, is therefore about 4-feet square, with the palletized cargo in turn being a minimum of 4 feet in length, and either 4 feet or 8 feet in width. The minimum length of a row of multiple pallets is about 8 feet. However, in

order to further clarify the meaning of this limitation, Applicant has also revised the phrase “individual loads of said palletized cargo” to read “full loads of said palletized cargo that will fill the length of a standard highway dry van”. Standard lengths for a highway dry van are about 48 feet and about 53 feet, again owing mainly to regulatory factors, and again with some relatively minor variations. A full load of palletized cargo that will fill the length of a standard dry van, as recited in claim 1, will therefore be about 12 pallet lengths long (about 48 feet) or more.

Support for the above amendment to claim 1, and the amendment to the specification discussed below, is inherent in the application as originally filed. The application clearly discloses and discusses tractor trucks, box trailers, and so on, and, inasmuch as the industry standards discussed in the preceding paragraphs have been in effect for several decades, a person of ordinary skill in the relevant art would, at the time the application was filed, have clearly understood that these limitations were an inherent and required aspect of the described system. The amendments to the claims and specification therefore do not constitute “new matter.” If the Examiner believes that additional documentation is need to establish the knowledge of persons skilled in the relevant art at the time the application was filed, Applicant will be pleased to provide it.

In view of the foregoing, Applicant respectfully submits that what is meant by the traveling conveyor having a horizontal deck with “sufficient length to support said rows of multiple pallets that form said full loads of said palletized cargo” is clear, and that the rejection of claim 1 and its depending claims under 35 USC 112 is overcome.

b. Amendments to Specification

The specification has been amended to provide support for the amendments made to claim 1, relating to the size of the palletized cargo, namely that the palletized cargo is sized to fill singly or two abreast the width of a dry van trailer.

As was stated in the response, Applicant’s original specification and drawings clearly show a dry van trailer, of the type almost universally utilized to transport palletized goods in the United States. As is well known to those skilled in the relevant

art, the widths of dry van trailers are standardized (in the United States) at approximate 8 foot and 8.5 foot widths and the lengths are also mostly standardized at about 48 feet and 53 feet, with some variations. The vast bulk of pallets, in turn, are constructed with an approximate 4 foot by 4 foot footprint, with some variations of a few inches; for example, a 48 inch by 40 inch pallet is the standard in the grocery industry. To be loaded into a dry van, as is the norm, the cargo is mounted on single pallets or on groups of two, four, six, etc. pallets, such that the single pallet width (4 foot) cargo fills the van two abreast and the two pallet width (8 foot) cargo fills the width of the dry van singly.

The foregoing information is well known to those skilled in the relevant art and is inherent in Applicant's original description and drawings. The description thereof that has been added to the specification and claim 1 by the foregoing amendment therefore does not constitute new matter.

c. Response to Claim Rejections - 35 USC. 103

(i) Claims 1-15

Claims 1-3 and 5-6 were rejected under 35 USC 103(a) as being unpatentable over Staeger in view Atwater and further in view Suizu and Proske. Claims 7-8, 10-11 and 14 were rejected under 35 USC 103(a) over Staeger in view of Atwater, Suizu and Proske and further in view Tharpe. Claim 9 was rejected under 35 USC 103(a) over Staeger in view of Atwater, Suizu and Proske and further in view of Ringer. Claims 12-13 were rejected under 35 USC 103(a) over Staeger in view of Atwater, Suizu and Proske and Thorton and further in view of Barski. Claim 15 was rejected under 35 USC 103(a) over Staeger in view of Atwater, Suizu and Proske and Thorton and further in view of Winski.

In the previously response, dated 15 September 2008, Applicant explained that, in addition to Staeger not showing a conveyor capable of moving rows of pallets off either first or second ends, as required by claim 1, the references do not show the feed conveyor, storage racks and loading/unloading conveyor having elongate, generally

horizontal end portions with sufficient length to support the rows of pallets that form the loads of cargo, with the traveling conveyor being movable between locations in which its elongate deck is aligned longitudinally with the elongate end portions of the other components, as is also required by claim 1. In the office action, the Examiner held that the arguments were not persuasive, stating "Applicant may consider it novel to have a feed conveyor, storage racks, loading conveyor and traveling conveyor each having sufficient length to support and load in one operation individual loads comprising rows of multiple pallets simultaneously, but that is not the only interpretation available from the intended use recitation. It has been held the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish". The Examiner therefore held that the prior art met the claims, on grounds that in the prior art the rows of multiple pallets can be loaded individually, e.g., one at a time.

In response, Applicant has amended claim 1 to move the limitations from the "whereby" clause to the elements in the main body of the claim. Furthermore, as discussed above, Applicant has amended claim 1 to recite that the traveling conveyor and the end portions of each of the feed conveyor, storage racks and loading/unloading conveyor are sufficient to support the rows of multiple pallets that form full loads of the palletized cargo. Applicant has also amended the claim to recite that the full loads are received by or discharged from the traveling conveyor simultaneously.

Accordingly, Applicant respectfully submits that claim 1, as amended herein, recites structural differences that distinguish the claimed invention over the prior art: As the Examiner noted, the references disclose structures that can carry/load pallets individually. However, they cannot support/load a full load of palletized cargo simultaneously, as is required by amended claim 1. Applicant therefore respectfully submits that the amendments to claim 1 overcome the rejection of claim 1 and its dependent claims 2-15 under 35 USC 103.

(ii) Claims 16-19 and 22-26

Independent claim 16 and its dependent claims 17-18 and 22-26 were rejected under 35 USC 103(a) as being unpatentable over Holtz in view Thorton and Lang. In response, Applicant has amended claim 16 to include limitations distinguishing over the cited references

In the response dated 15 September 2008, Applicant explained that Holtz's paddle does not move between a retracted position beneath the upper surface of the dock member and a deployed position above the surface of the dock member, being that it is in all cases located above the load surface, and that the proposed modification using Lang would be not be obvious. In the present Office Action, the Examiner disagreed with Applicant's argument, stating "because both Lang's and Holtz's pusher connection means connects below a load surface, whether connected at either end or at the middle, Holtz's paddle will still move translationally, the claimed invention."

Applicant agrees that Holtz's paddle will move translationally, however as noted in the prior response it is always located above the load surface. To modify Holtz based on Lang, to move the paddle between a positions below and above the load surface, as required by claim 16 would not be obvious for two reasons: First, Holtz teaches against the modification, since Holtz teaches that the paddle must remain above the load surface in order to perform its functions, e.g., to act as a stop. Second, the proposed combination would not work, since Holtz's paddle (which must extend across the load surface to function) could not be retracted into a narrow track within the load surface in the manner of Lang's hook.

For the above reasons, it is believed that the combined references fail to establish a prima facie case of obviousness under 35 USC 103. However, in order to further distinguish over the references, Applicant has amended claim 16 to recite that the upper surface of the dock is formed by a thin, rigid plate member, that the paddle extends across the full width of the surface, and that the paddle is lowered to a retracted position below the outer end of the thin plate member and raised to a deployed position over the outer end of the plate member. No such arrangement, with respect to the outer end of a thin plate member, is taught or suggested by the references.

Dependent claims 18-19 and 22-26 have been canceled, leaving dependent claim 17.

Accordingly, Applicant respectfully requests that the rejection of claims 16-17 has been overcome by the present amendment.

d. New Claims

New claims 27-29 have been added by the present amendment.

New claims 27-28 depend from amended independent claim 16, and recite further aspects of the chain drive that raises/lowers and translates the unloading paddle.

While the Holtz reference shows a chain drive, it does not, for the reasons previously discussed, show a drive that raises a paddle over the end of a plate member as required by the claims.

New independent claim 29 corresponds to claim 1, but includes a limitation requiring that the traveling conveyor includes a conveyor mechanism for propelling the loads of pallets off the first and second ends of the deck, the conveyor mechanism being selected from the group consisting of belt conveyors, roller conveyors, and combinations thereof. As discussed previously, the Staeger reference (which has been cited as showing a traveling conveyor) actually uses a forklift-like tine mechanism, and therefore does not show the mechanisms required by claim 29.

It is therefore believed that new claims 27-29 are patentably distinct over the cited art.

e. Additional Amendments

Additional amendments have been made in claims 3-5 to improve the form thereof.

f. Conclusion

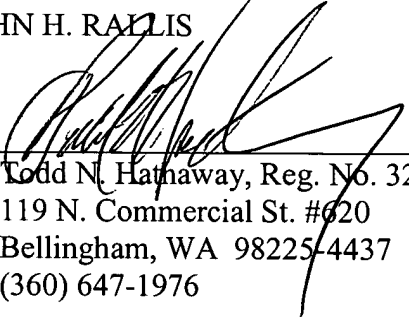
Applicant respectfully requests reconsideration of the present application in view of the remarks set forth herein. It is believed that the claims are now in condition for allowance. If there is any matter that can be expedited by consultation with Applicant's attorney, such would be welcome. Applicant's attorney can normally be reached at the telephone number given below.

Signed at Bellingham, County of Whatcom, State of Washington this 20th day of April, 2009.

Respectfully submitted,

JOHN H. RALLIS

By



Todd N. Hathaway, Reg. No. 32,991
119 N. Commercial St. #620
Bellingham, WA 98225-4437
(360) 647-1976